

プログラム等改変業務管理システム試験
(協定規則第 156 号 (同規則の規則 7. 1. に限る))

1. 総則

プログラム等改変業務管理システム試験の実施にあたっては、「自動車の特定改造等の許可に関する技術上の基準に関する細目等を定める告示」(令和 2 年国土交通省告示第 787 号) に定める「協定規則第 156 号の技術的な要件 (同規則の規則 7. 1. に限る。)」の規定及び本規定によるものとする。

2. 試験条件

書面及び現地審査により試験を行うことができる。

3. 試験記録及び成績

試験記録及び成績は、付表の様式に記入する。

3. 1. 当該試験時において該当しない箇所には斜線を引くこと。

3. 2. 記入欄は、順序配列を変えない範囲で伸縮することができ、必要に応じて追加してもよい。

3. 3. 試験記録及び成績は、日本語又は英語のみの記載でもよい。

付表

Attached Table

プログラム等改変業務管理システム試験記録及び成績

SOFTWARE UPDATE MANAGEMENT SYSTEM TEST DATE RECORD FORM

(協定規則第156号(規則7.1.プログラム等改変業務管理システムに関する要件))

1958 Agreement of the United Nations Economic Commission for Europe Regulation No.156

(Restricted to paragraphs 7.1. Requirements for the Software Update Management System)

試験期日	年	月	日	試験場所	試験担当者
Test Date	Y.	M.	D.	Test Site	Tested by

○改訂

Series

改訂番号

補足改訂番号

Series No.

Supplement No.

○試験対象業務管理システム

Test Management System

社名

業務管理システムの名称

Manufacturer

Names of Management System

○試験成績

Test Results

※ 各項目について適合性を裏付ける資料のリストを添付のこと。書式は任意で構わない。

Attach a list of supporting material for each paragraph. The format does not matter.

要件 Requirements		適合性 Conformity
段落 Paragraph	内容 Contents	
7.1.1.	Processes to be verified at initial assessment	
7.1.1.1.	A process whereby information relevant to this Regulation is documented and securely held at the vehicle manufacturer and can be made available to an Approval Authority or its Technical Service upon request;	pass / fail
7.1.1.2.	A process whereby information regarding all initial and updated software versions, including integrity validation data, and relevant hardware components of a type approved system can be uniquely identified;	pass / fail
7.1.1.3.	A process whereby the vehicle manufacturer assigns a dedicated RXSWIN for every Regulation No. X type approval to which the vehicle manufacturer executes software updates to type approval relevant software of the Electronic Control System contributing to the UN Regulation No. X type approval relevant characteristics.	pass / fail
7.1.1.4.	A process whereby, for a vehicle type that has an RXSWIN, information regarding the RXSWIN of the vehicle type before and after an update can be accessed and updated. This shall include the ability to update information regarding the software versions and their integrity validation data of all relevant software for each RXSWIN;	pass / fail / N.A
7.1.1.5.	A process whereby, for a vehicle type that has an RXSWIN, the vehicle manufacturer can verify that the software version(s) present on a component of a type approved system are consistent with those defined by the relevant RXSWIN;	pass / fail / N.A
7.1.1.6	A process whereby any interdependencies of the updated system with other systems can be identified;	pass / fail
7.1.1.7.	A process whereby the vehicle manufacturer is able to identify target vehicles for a software update;	pass / fail

7.1.1.8.	A process to confirm the compatibility of a software update with the target vehicle(s) configuration before it is issued. This shall include an assessment of the last known software/hardware configuration of the target vehicle(s) for compatibility with the update before it is issued;	pass / fail
7.1.1.9.	A process to assess, identify and record whether a software update will affect any type approved systems. This shall consider whether the update will impact or alter any of the parameters used to define the systems the update may affect or whether it may change any of the parameters used to type approve those system (as defined in the relevant legislation);	pass / fail
7.1.1.10.	A process to assess, identify and record whether a software update will add, alter or enable any functions that were not present, or enabled, when the vehicle was type approved or alter or disable any other parameters or functions that are defined within legislation. The assessment shall include consideration of whether:	
(a)	Entries in the information package will need to be modified;	pass / fail
(b)	Test results no longer cover the vehicle after modification;	pass / fail
(c)	Any modification to functions on the vehicle will affect the vehicle's type approval.	pass / fail
7.1.1.11.	A process to assess, identify and record if a software update will affect any other system required for the safe and continued operation of the vehicle or if the update will add or alter functionality of the vehicle compared to when it was registered;	pass / fail
7.1.1.12.	A process whereby the vehicle user is able to be informed about updates.	pass / fail
7.1.1.13.	A process whereby the vehicle manufacturer shall be able to make the information according to paragraph 7.1.2.3. and 7.1.2.4. available to responsible Authorities or the Technical Services. This may be for the purpose of type approval, conformity of production, market surveillance, recalls and Periodic Technical Inspection (PTI).	pass / fail
7.1.2.	The vehicle manufacturer shall record, and store, the following information for each update applied to a given vehicle type:	pass / fail
7.1.2.1.	Documentation describing the processes used by the vehicle manufacturer for software updates and any relevant standards used to demonstrate their compliance;	pass / fail
7.1.2.2.	Documentation describing the configuration of any relevant type approved systems before and after an update, this shall include unique identification for the type approved system's hardware and software (including software versions) and any relevant vehicle or system parameters;	pass / fail
7.1.2.3.	For every RXSWIN, there shall be an auditable register describing all the software relevant to the RXSWIN of the vehicle type before and after an update. This shall include information of the software versions and their integrity validation data for all relevant software for each RXSWIN.	pass / fail / N.A
7.1.2.4.	Documentation listing target vehicles for the update and confirmation of the compatibility of the last known configuration of those vehicles with the update.	pass / fail
7.1.2.5.	Documentation for all software updates for that vehicle type describing:	
(a)	The purpose of the update;	pass / fail
(b)	What systems or functions of the vehicle the update may affect;	pass / fail
(c)	Which of these are type approved (if any);	pass / fail
(d)	If applicable, whether the software update affects the fulfilment of any of the relevant requirements of those type approved system;	pass / fail
(e)	Whether the software update affects any system type approval parameter;	pass / fail
(f)	Whether an approval for the update was sought from an approval body;	pass / fail
(g)	How the update may be executed and under what conditions;	pass / fail
(h)	Confirmation that the software update will be conducted safely and	pass / fail
(i)	Confirmation that the software update has undergone and successfully passed verification and validation procedures.	pass / fail

7.1.3.	Security, the vehicle manufacturer shall demonstrate:	
7.1.3.1.	The process they will use to ensure that software updates will be protected to reasonably prevent manipulation before the update process is initiated;	pass / fail
7.1.3.2.	The update processes used are protected to reasonably prevent them being compromised, including development of the update delivery system;	pass / fail
7.1.3.3.	The processes used to verify and validate software functionality and code for the software used in the vehicle are appropriate.	pass / fail
7.1.4.	The vehicle manufacturer shall not execute software updates to vehicles approved to the 01 series of amendments of this Regulation already registered in the market, unless an RXSWIN has been assigned to every Regulation No. X type approval assessed during the performing of the process in paragraph 7.1.1.9.	pass / fail / N.A
7.1.5.	Additional Requirements for Software Updates over the air	
7.1.4.1.	The vehicle manufacturer shall demonstrate the processes and procedures they will use to assess that over the air updates will not impact safety, if conducted during driving.	pass / fail / N.A
7.1.4.2.	The vehicle manufacturer shall demonstrate the processes and procedures they will use to ensure that, when an over the air update requires a specific skilled or complex action, for example recalibrate a sensor post-programming, in order to complete the update process, the update can only proceed when a person skilled to do that action is present or is in control of the process.	pass / fail / N.A

備考

Remarks
